CLAIMS

1. An applicator for applying RFID labels of the type having a transponder, the applicator comprising:

an application zone;

an applicator head positioned adjacent the application zone and adapted for applying the label to a product;

an antenna positioned adjacent the application zone and adapted for reading the transponder;

a test circuit for receiving information from the antenna and adapted to determine if the transponder is viable; and

a reject area adapted for receiving rejected labels from the applicator head if the test circuit determines that there is a non-viable transponder.

2. The applicator of claim 1 wherein the reject area is separate from the application zone.

3. The applicator of claim 2 wherein the applicator head is movable between a home position adjacent the application zone and a reject position adjacent the reject area.

4. The applicator of claim 3 further comprising a slide rail on which the applicator head is slidably movable between the home and reject positions.

5. The applicator of claim 4 further comprising a pneumatic power supply for moving the head from the home position to the reject position.

6. The applicator of claim 4 wherein a tamp assembly is attached to the slide rail and a label pad is connected to the tamp assembly.

7. The applicator of claim 6 further comprising a movement device carried by the tamp assembly and adapted for moving the applicator head toward the product.

8. The applicator of claim 3 further comprising air channels formed within the applicator head.

9. The applicator of claim 8 wherein the air channels are connected to an air source capable of at least one of moving air from the air source into the air channels and moving air from the air channels toward the air source.

10. The applicator of claim 1 wherein the applicator head defines air channels through which air is movable to blow the labels onto the product.

11. The applicator of claim 10 further including a tamp assembly for moving the applicator head toward the product to facilitate blowing the label onto the product.

12. The applicator of claim 3 further including a peel edge for separating labels from a carrier web, the peel edge being disposed adjacent the applicator head when in the home position; a suctioning mechanism to hold the label against the applicator head; and a blowing mechanism to blow the label onto the product if the transponder is viable and to blow the label to the reject area if the transponder is non-viable.

13. The applicator of claim 1 wherein the antenna is adapted to write information to the transponder; wherein the test circuit is adapted to determine if the information written to the transponder is viable; and wherein the reject area is adapted for receiving rejected labels from the applicator head if the test circuit determines that there is non-viable information on the transponder.

14. The applicator of claim 1 wherein the applicator head includes a label pad and wherein the antenna is positioned adjacent the label pad.

15. The applicator of claim 14 wherein the antenna is carried by the applicator head.

16. The applicator of claim 15 wherein the antenna is positioned above the label pad within the applicator head.

17. The applicator of claim 16 further comprising air channels formed within the applicator head.

18. The applicator of claim 17 wherein the air channels are connected to an air control capable of at least one of moving air from the air control into the air channels and moving air from the air channels toward the air control.

19. The applicator of claim 18 wherein the air channels extend around the antenna on at least one side within the applicator head.

20. A method of applying an RFID label to an item, the label having a transponder, the method comprising the steps of:

positioning a label adjacent an application zone;

testing the label for viability adjacent the application zone;

communicating the result of the test to a control circuit;

allowing the control circuit to communicate with a power supply; and

operating the power supply to move the label to the item if the label is viable.

21. The method of claim 20 further including the step of operating an RFID antenna adjacent the application zone to test the viability of the label.

22. The method of claim 21 wherein the label is tested when the label is positioned at least partially on an applicator head.

23. The method of claim 22 wherein the testing step includes coupling the antenna electronically to the label through at least a portion of the applicator head.

24. The method of claim 21 further comprising the step of writing to the label after the test has confirmed a viable label.

25. The method of claim 24 further comprising the steps of testing information written to the label for viability of the information and applying the label to the item if the information is viable and moving the label to a reject area if the information is non-viable.

26. The method of claim 21 further comprising the step of moving the label to a reject area if the test reveals that the label is non-viable.

27. The method of claim 26 wherein the moving step includes sliding an applicator head carrying the label from a position adjacent the application zone to a position adjacent the reject area.

28. The method of claim 21 wherein the antenna is mounted within the applicator head; wherein at least one air channel is formed in the applicator head and extends around the antenna; and wherein the method further includes the step of evacuating air from the at least one air channel after the test is complete.

29. The method of claim 20 wherein the operating step includes the step of blowing the label to move the label to the item if the label is viable.

30. The method of claim 29 wherein the blowing step includes operating an air source to move air through air channels formed in an applicator head.

31. The method of claim 29 further including the step of moving the applicator head toward the item prior to the blowing step.

32. The method of claim 30 wherein the operating step includes suctioning the label to the applicator head prior to the blowing step.

33. The method of claim 32 further including the step of guiding a carrier web carrying the label around a peel edge adjacent the applicator head to separate the label from the carrier web prior to the suctioning step.

34. A method of applying an RFID label to an item, the label having a transponder, the method comprising the steps of:

positioning a label adjacent an application zone;

testing the label for viability adjacent the application zone with an RFID antenna; and

moving the label to the item if the label is viable and to a reject area if the label is non-viable.

35. The method of claim 34 further comprising the step of writing to the label after the test has confirmed a viable label.

36. The method of claim 35 further comprising the steps of testing information written to the label for viability of the information and applying the label to the item if the information is viable and moving the label to the reject area if the information is non-viable.

37. The method of claim 34 wherein the moving step includes the step of blowing the label to move the label to the item if the label is viable and blowing the label to move the label to the reject area if the label is non-viable.

38. The method of claim 37 wherein the moving step includes sliding an applicator head carrying the label by suction from a home position adjacent the application zone to a reject position adjacent the reject area if the label is non-viable.